

AMENDMENTS TO THE CLAIMS

1-96. **(Cancelled)**

97. **(Currently Amended)** A method for decreasing neuronal cell death associated with a neuropathy, comprising contacting a neuronal cell ~~at risk of such cell death~~ with a morphogen comprising a dimeric protein, the dimeric protein having one or more of the following:

- (1) a conserved C-terminal six-cysteine skeleton 60% identical to residues 43-139 of SEQ ID NO: 5;
- (2) a conserved C-terminal seven-cysteine skeleton 70% homologous to residues 38-139 of SEQ ID NO: 5;
- (3) a conserved C-terminal six-cysteine skeleton 70% homologous to residues 43-139 of SEQ ID NO: 5; or
- (4) an amino acid sequence of human OP-1, mouse OP-1, human OP-2, mouse OP-2, 60A, GDF-1, BMP2A, BMP2B, DPP, Vg1, Vgr-1, BMP3, BMP5, or BMP6; and wherein the morphogen (i) stimulates the production of an N-CAM or L1 isoform in said neuronal cell, and (ii) decreases neuronal cell death associated with a neuropathy.

98. **(Cancelled)**

99. **(Currently Amended)** A method for decreasing neuronal cell death associated with a chemical or physical injury, comprising contacting a neuronal cell ~~at risk of such cell death~~ with a morphogen comprising a dimeric protein with:

- (1) a conserved C-terminal six-cysteine skeleton 60% identical to residues 43-139 of SEQ ID NO: 5;
- (2) a conserved C-terminal seven-cysteine skeleton 70% homologous to residues 38-139 of SEQ ID NO: 5;
- (3) a conserved C-terminal six-cysteine skeleton 70% homologous to residues 43-139 of SEQ ID NO: 5; or
- (4) an amino acid sequence of human OP-1, mouse OP-1, human OP-2, mouse OP-2, 60A, GDF-1, BMP2A, BMP2B, DPP, Vg1, Vgr-1, BMP3, BMP5, or BMP6; and

wherein the morphogen (i) stimulates the production of an N-CAM or L1 isoform in said neuronal cell, and (ii) decreases neuronal cell death associated with a chemical or physical injury.

## 100-104.(Canceled)

105. (Previously presented) The method of claim 97 or 99, wherein the morphogen is human OP-1.
106. (Previously presented) The method of claim 97 or 99, wherein the morphogen is mouse OP-1.
107. (Previously presented) The method of claim 97 or 99, wherein the morphogen is human OP-1, mouse OP-1, human OP-2, mouse OP-2, 60A, BMP2A, BMP2B, Vg1, Vgr-1, BMP5, or BMP6.
108. (Previously presented) The method of claim 97 or 99, wherein the morphogen is human OP-1, mouse OP-1, human OP-2, mouse OP-2, BMP5, or BMP6.
109. (Previously presented) The method of claim 97 or 99, wherein the morphogen is a dimeric protein having a conserved C-terminal six-cysteine skeleton 60% identical to residues 43-139 of SEQ ID NO: 5.
110. (Previously presented) The method of claim 97 or 99, wherein the morphogen is a dimeric protein having a conserved C-terminal seven-cysteine skeleton 70% homologous to residues 38-139 of SEQ ID NO: 5.
111. (Previously presented) The method of claim 97 or 99, wherein the morphogen is a dimeric protein having a conserved C-terminal six-cysteine skeleton 70% homologous to residues 43-139 of SEQ ID NO: 5.